

# Long-Range Fifty Caliber Rifles: Should They Be More Strictly Regulated?

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## Summary

In the 109<sup>th</sup> Congress, legislation has been introduced to more strictly regulate certain .50 caliber rifles, some of which have been adopted by the U.S. military as sniper rifles. These rifles are chambered to fire a relatively large round that was originally designed for the Browning Machine Gun (BMG). Gun control advocates have argued that these firearms have little sporting, hunting, or recreational purpose. They maintain that these rifles could be used to shoot down aircraft, rupture pressurized chemical tanks, or penetrate armored personnel carriers. Gun control opponents counter that these rifles are expensive, cumbersome and rarely, if ever, used in crime. Furthermore, they maintain that these rifles were first developed for long-range marksmanship competitions and, then adopted by the military as sniper rifles. Related amendments may be offered during Senate-consideration of the Protection of Lawful Commerce in Arms Act (S. 397). (For further information, see CRS Report RS22074, *Limiting Tort Liability of Gun Manufacturers and Gun Sellers: Legal Analysis of P.L. 109-92 (2005)*, by Henry Cohen.) The issue for Congress is whether to regulate these firearms more stringently based on their destructive potential in a post-9/11 environment. And if regulation is pursued, what measures seem most effective and appropriate. This report will be updated as needed.

## Legislative Proposals in the 109<sup>th</sup> Congress

In the 109<sup>th</sup> Congress, two proposals have been introduced to regulate more strictly certain long-range .50 caliber rifles. The *Fifty Caliber Sniper Weapons Regulation Act of 2005* (S. 935), introduced by Senator Dianne Feinstein, would amend the National Firearms Act (NFA)<sup>1</sup> to regulate “.50 caliber sniper weapons” in the same fashion as short-barreled shotguns and silencers, by levying taxes on the manufacture and transfer of such firearms and by requiring owner and firearm registration. The other proposal introduced by Representative James Moran, the *50 Caliber Sniper Rifle Reduction Act* (H.R. 654), would also amend the NFA to include these weapons, but would also amend the Gun Control Act<sup>2</sup> to effectively freeze the population of these weapons legally available to private persons, and to prohibit any further transfer of these firearms. In other words, H.R. 654 would grandfather in existing rifles, but would ban their further transfer. Consequently, the proposal would eventually eliminate these rifles altogether from the civilian gun stock. It is likely that covered .50 caliber rifles would have to be destroyed or handed over to the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) as contraband, when the legal firearm owner died or wanted to give up the firearm. As currently constructed, H.R. 654 includes no compensation provision for rifles destroyed or handed over to the federal government under this proposal.

Furthermore, both proposals (S. 935 and H.R. 654) would define “.50 caliber sniper weapon” to mean “a rifle capable of firing center-fire cartridge in .50 caliber, .50 BMG caliber, any other variant of .50 caliber or any metric equivalent of such calibers.” Many rifles, and even some handguns, are chambered to fire .50 caliber ammunition, meaning the projectile is about one-half inch in diameter. Opponents of this legislation are likely to note that this definition is very broad and would likely cover .50 caliber rifles that would not be considered “long-range” or “sniper rifles.” The .50 BMG caliber round, on the other hand, is an exceptionally large cartridge (projectile and casing), which was once used almost exclusively as a heavy machine gun round.

## Long-Range Shooting and the .50 Caliber BMG Cartridge

Certain specialized firearms manufacturers began producing long-range .50 caliber rifles in the early 1980s. In recent years, these firearms have gained popularity among firearms enthusiasts; and, in 1985, they formed the Fifty Caliber Shooters Association, Inc. (FCSA) to “advance the sporting uses of the .50 caliber BMG cartridge.”<sup>3</sup> The FCSA holds competitive marksmanship matches of 1,000 yards (and longer).

The .50 caliber BMG cartridge was developed following the First World War as a “heavy machine gun” cartridge. Adopted by the U.S. Army in 1923, it has seen continuous service ever since. According to one firearms expert, one common variety of the .50 caliber BMG cartridge (12.7x99mm) includes a projectile that weighs 665 grains; whereas, a comparable mid-size rifle cartridge like the .308 Winchester (7.62x51mm) includes a projectile that weighs about 147 grains.<sup>4</sup> Hence the .50 caliber BMG projectile is 4.5 times greater in weight than the .308

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<sup>1</sup> 26 USC, Chapter 53, §5801 et seq.

<sup>2</sup> 18 USC, Chapter 44, §921 et seq.

<sup>3</sup> FCSA Fact Sheet, available at <http://www.fcsa.org/articles/about.html>.

<sup>4</sup> Keith Pagel, “A Brief History of .50 Browning Machine Gun Cartridge Development,” *Very High Power Magazine*,

Winchester. While a cartridge's ballistic performance depends on the type of projectile, grade of propellant (gunpowder) and other factors, the .50 caliber BMG cartridge casing holds about five times more propellant than the .308 Winchester. By further comparison, the same rounds have: (1) a maximum effective range of 2,000 and 1,500 yards; (2) a muzzle velocity of 2,900 and 2,750 feet per second; and (3) a muzzle energy of 12,000 and 2,400 foot-pounds, respectively.<sup>5</sup> The muzzle energy of the .50 caliber BMG round provides not only increased "knock down" power, but increased accuracy as well. In modern rifles, the .50 caliber BMG round can routinely hit a 55-gallon drum at ranges of a mile (1,760 yards).<sup>6</sup> In skilled hands and known wind conditions, such a rifle can be used to place five shots within a 6-inch circle at a range of over one-half mile (1,000 yards).<sup>7</sup>

The FCSA maintains that long-range .50 BMG caliber rifles were first developed for marksmanship competitions and, then adopted by the military as sniper rifles. One of the rifles adopted by the U.S. Army is the M-107 Long Range Sniper Rifle. Outfitted with a 10-round magazine, the M-107 is a semiautomatic rifle, meaning it is self-loading, but fires only one round per trigger pull. It is also outfitted with an "attached optics/electro-optics [scope] that supports all weather, day/night tactical dominance...."<sup>8</sup> Fifty caliber BMG ammunition comes in a wide variety, so the rifle is capable of delivering incendiary, armor piercing, tracer, and dual purpose ammunition. According to one firearms expert:

The primary mission of this rifle is to engage and defeat material targets at extended ranges to include parked aircraft; command, control, communications, computers, and intelligence (C4I) sites; radar sites; ammunition; petroleum, oil and lubricants; and various other thin skinned (lightly armored) material targets out to 2000 meters.<sup>9</sup>

Loaded with nine rounds, the M-107 weighs about 32 pounds. For FY2005, the unit price for a single rifle is \$14,833 (based on a modular cost of \$8.9 million for 600 rifles).<sup>10</sup> The M-107 government contractor—Barrett Firearms Manufacturing Company—produces long-range .50 caliber rifles, which are available to the general public.<sup>11</sup> Equipped with conventional scopes, these rifles range in price from \$2,800 for a single-shot bolt-action rifle to \$6,750 for a semiautomatic rifle (*new in box (NIB)*).<sup>12</sup>

Regarding the availability of armor piercing/incendiary rifle ammunition in the civilian gun market, for the past six years (FY2000-FY2005), a provision has been included in the Department of Defense Appropriations Act that bans the resale of military surplus .50 caliber ammunition, unless it is "demilitarized," so that the refurbished ammunition does not include armor piercing,

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available at [http://www.fcsa.org/articles/other/brief\\_history.html](http://www.fcsa.org/articles/other/brief_history.html).

<sup>5</sup> Ibid.

<sup>6</sup> Frank C. Barnes/Edited by M.L. McPherson, *Cartridges of the World*, 9<sup>th</sup> edition (Iola, WI: Krause Publications, Inc., 2000), p. 343.

<sup>7</sup> Ibid.

<sup>8</sup> See *Gary's U.S. Infantry Weapons Reference Guide*, available at <http://www.inetres.com/gp/military/infantry/rifle/M107.html>.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Among others, domestic manufacturers of long-range .50 caliber rifles include the American Military Arms Corporation; Armalite, Inc.; McMillan, G. & Co. Inc.; and Serbu Firearms.

<sup>12</sup> Ned Schwing, *2005 Standard Catalog of Firearms: The Collector's Price and Reference Guide*, 15<sup>th</sup> edition, (Iola, WI: Krause Publications, Inc., 2005), p. 124. The price differential between the M107 and civilian long-range .50 caliber rifles is accounted for in large part by the difference in the scopes. For example, the military scope is much more advanced and includes "all weather" and "night" optics capabilities.

incendiary, and tracer projectiles. This provision includes exceptions for ammunition that is refurbished for the National Guard or for export to foreign governments for military purposes.<sup>13</sup> While such ammunition introduced into the civilian market prior to the ban is still available, it is a specialty item and not always easily located.

## Potential Deadly Misuse of Long-Range Fifty Caliber Rifles

Gun control advocates have reported that long-range .50 caliber rifles could be used by terrorists in several deadly scenarios. According to the Violence Policy Center, given the range and power of a .50 caliber BMG round, a rifle chambered to fire this round could be used to bring down a slow/low-flying aircraft.<sup>14</sup> It is also plausible, that a terrorist using such a rifle could punch holes in pressurized chemical tanks, igniting combustible materials or leaking hazardous gases.<sup>15</sup> In addition, such a rifle could be used to penetrate lightly armored vehicles—such as those used by law enforcement and protective limousine services.<sup>16</sup> While these potentialities exist, as pointed out by gun control opponents, long-range .50 caliber rifles have not been the weapons of choice of criminals as law enforcement encounters with these weapons have been few and sporadic.<sup>17</sup> Given the potential destructiveness of these rifles, one option for Congress to consider is more strictly regulating these firearms under the National Firearms Act.

## National Firearms Act (NFA), As Amended

Two major statutes regulate the commerce in, and possession of, firearms: The National Firearms Act of 1934<sup>18</sup> and the Gun Control Act of 1968,<sup>19</sup> as amended. Supplementing federal law, many state firearms laws are stricter than federal law. For example, some states prohibit any possession of machine guns by private persons, require permits to obtain other firearms, and impose waiting periods for firearm transfers.<sup>20</sup> Other states are less restrictive, but state law cannot preempt federal law. In general, federal law serves as the minimum standard in the United States.

In 1934, Congress passed the NFA to limit the availability of machine guns, short-barreled rifles and shotguns, silencers, and a “catch-all” class of other “concealable” firearms identified as “any other weapon.”<sup>21</sup> Many of these weapons were considered particularly lethal and often the

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<sup>13</sup> For FY2005, see P.L. 108-287, 118 Stat. 991.

<sup>14</sup> Violence Policy Center, *The Threat Posed to Helicopters by 50 Caliber Anti-Armor Rifles*, Aug. 2004, 8 pp., available at <http://www.vpc.org/graphics/50Helicopters.pdf>.

<sup>15</sup> Violence Policy Center, *Sitting Ducks: The Threat to the Chemical and Refinery Industry From 50 Caliber Sniper Rifles*, Aug. 2004, 28 pp., at <http://www.vpc.org/studies/duckcont.htm>.

<sup>16</sup> Violence Policy Center, *One Shot, One Kill: Civilian Sales of Military Sniper Rifles, May 1999*, 69 pp., available at <http://www.vpc.org/graphics/snipcov2.pdf>.

<sup>17</sup> National Rifle Association-Institute for Legislative Action, “.50 Caliber Rifles and Ammunition: Latest Anti-Gun Targets of Opportunity,” *NRA Fact Sheet*, May 12, 2005, 2 pp., available at <http://www.nraila.org/Issues/FactSheets/Read.aspx?ID=166>.

<sup>18</sup> 73<sup>rd</sup> Congress, P.L. 474, June 26, 1934, 48 Stat. 1236. The NFA is currently codified at 26 USC, Chapter 53, §5801 et seq.

<sup>19</sup> P.L. 90-618; 82 Stat. 1213; codified at 18 USC, Chapter 44, §921 et seq.

<sup>20</sup> In several state legislatures, proposals have been considered to more strictly regulate .50 caliber rifles. For further information, see the Fifty Caliber Institute’s website, available online at <http://www.fiftycal.org/legislation.php>.

<sup>21</sup> The term “any other weapon” was derived from the NFA definition of firearm, which included firearms “capable of

weapons of choice of “gangsters” during the prohibition era (1919-1933). As part of the Internal Revenue Code, the NFA levies taxes on all aspects of the manufacture/importation and distribution of such firearms, and requires that these firearms and their owners be registered at every point the firearms change ownership in the chain of commerce. The NFA required the Secretary of the Treasury to establish a registry of all NFA firearms in the United States that were not under the control of the United States. Today, the registry is maintained by the Attorney General.<sup>22</sup>

Title II of the Gun Control Act (GCA) of 1968 revised and re-codified the NFA to (1) expand its scope of coverage to include destructive devices (bombs, incendiary devices, and weapons with a bore of greater than one-half inch); (2) include a definition for “any other weapon” to more precisely include certain smooth bore, short-barreled handguns; and (3) redefine the term “firearm” to exclude antique firearms or any device (except machine guns and destructive devices) that were determined to be “collectors’ items” by reason of their date of manufacture, value, design, and other characteristics and would not likely be used as a weapon. Under this provision, the Attorney General is authorized to reclassify certain firearms as “collectors items,” administratively removing them from the NFA. The GCA also increased penalties for violating the NFA. In addition, the GCA included an amnesty provision that addressed a Supreme Court ruling regarding the registration of NFA weapons and the likelihood that individuals holding unregistered NFA firearms would incriminate themselves by registering such weapons.<sup>23</sup>

In 1986, Congress passed the Firearms Owners’ Protection Act (FOPA) and amended the GCA to prohibit the possession of machine guns that were not legally possessed or available for transfer prior to enactment (May 19, 1986).<sup>24</sup> While FOPA included exceptions for any department or agency of the United States, a state, or political subdivision thereof, it effectively froze the number of machine guns that were legally available to the general public in the United States.

As stated above, the NFA requires the Attorney General to maintain a central registry of all NFA firearms and owners in the United States, which are not in the possession or under the control of the United States. The Attorney General has delegated this duty to the ATF Director.<sup>25</sup> At ATF, the NFA Branch is charged with maintaining the registry—the National Firearms Registration and Transfer Record (NFRTR) database, which includes data on the make and model of registered firearms, registration dates, as well as biographic and address information about the persons to whom the firearms are registered. It is a felony to receive, possess, or transfer an unregistered NFA firearm.<sup>26</sup> Such offenses are punishable by a fine of up to \$250,000, imprisonment for up to 10 years, and forfeiture of the firearm and any vessel, vehicle, or aircraft used to conceal or convey the firearm.<sup>27</sup>

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being concealed on the person” that were not pistols or revolvers. Such firearms include “gadget-guns” that are disguised as pens, walking canes, belt buckles, knives, and flashlights. In 1968, Congress amended the NFA to more precisely define “any other weapon,” and to include certain smooth-bore, short-barreled firearms under that definition.

<sup>22</sup> Effective Jan. 23, 2003, the responsibility for administering the NFA shifted to the Attorney General, as Congress transferred ATF from Treasury to Justice under the Homeland Security Act. See P.L. 107-296, 116 Stat. 2135.

<sup>23</sup> *Haynes v. United States*, 88 S.Ct. 722, 390 U.S. 85, 19 L.Ed.2d 923 (1968). To overcome the constitutional defect, the amnesty provision (P.L. 90-618; 82 Stat. 1235, §207(b)) authorizes the Attorney General (previously, the Secretary of the Treasury) to conduct amnesties for no longer than 90 days to allow persons in possession of NFA weapons to register them without penalty. Such an amnesty was conducted officially from Nov. 2 through Dec. 1, 1968.

<sup>24</sup> P.L. 99-308, §102(9); 100 Stat. 452; codified at 18 USC §922(o)(1).

<sup>25</sup> See 27 CFR, Subpart G, §§479.101-479.105.

<sup>26</sup> 26 USC §§5861(d) and (j); 26 USC §5872; 49 USC §§781-788.

<sup>27</sup> Regarding proper registration, the NFA Branch provides certifications to, and testifies in, courts in criminal cases as

To deal in NFA firearms, a person is required to be a federal firearms licensee (FFL) under the GCA and also be a special occupational taxpayer (SOT) under the NFA. Class one SOTs are importers of NFA firearms; Class two SOTs are manufacturers of NFA firearms; and Class three SOTs are dealers. NFA firearms are often referred to as Class three weapons, for Class three dealers. The NFA imposes a \$200 manufacturing tax and a \$200 transfer tax each time a firearm changes hands.<sup>28</sup> Upon a transfer's approval, ATF places a tax stamp on the tax paid transfer document. The transferee may not take possession of the firearm until he holds the approved transfer document. Private persons, who are not otherwise prohibited by law, may acquire an NFA firearm in one of three ways: (1) a registered owner of an NFA firearm may apply for ATF approval to transfer the firearm to another person residing in the same state or to a FFL in another state; (2) an individual may apply to ATF for approval to make and register an NFA firearm (except machine-gun); or (3) an individual may inherit a lawfully registered NFA firearm.

## Options for Congress

Congress could consider several options for dealing with long-range .50 caliber rifles. One, Congress could take no action. Two, Congress could require that such rifles be registered under the NFA, as would Senator Feinstein's proposal (S. 935). Three, Congress could ban their further production for the civilian gun market, as would Representative Moran's proposal (H.R. 654). Four, Congress could also ban any further transfer of these firearms—effectively eliminating these weapons from the civilian gun market in time, as would H.R. 654. Five, these weapons could be banned outright, a scenario under which, Congress could also consider compensating owners for turning such firearms over to the federal government. Six, Congress could also consider recalling all existing armor piercing/incendiary .50 caliber BMG ammunition still available in the civilian gun market. Seven, Congress could consider setting ballistic performance standards that would benchmark the outward limit for .50 caliber rifle ammunition considered acceptable for sporting, hunting, or recreational purposes.

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to whether NFA firearms are properly registered. NFA-covered firearms, for which there are no records, are considered contraband and are subject to seizure.

<sup>28</sup> Transfers of NFA-covered firearms incur a tax of \$200 except for those classified as "any other weapon," which are taxed at a reduced \$5 rate. Certain NFA firearm transfers are tax-exempt. They include transfers to a lawful heir from an estate; transfers between FFLs, who are also SOTs; and transfers of "unserviceable firearms."

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